

Making Community-Based Wind Work

Financing

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SD PUC Wind Conference Sept 2005



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John Deere – *Facts*

Founded in 1837, Deere & Company

- Provides solutions for agriculture, construction & forestry, grounds care
- Is known as one of the most valued and trusted brands in mobile equipment
- Employs over 45,000 people
- Has annual sales of ~ \$20 Billion
- Finances equipment, parts and services through John Deere Credit



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John Deere – *Green Beyond Color*

Various *Running Green* projects demonstrate environmental considerations in business planning and decision-making:

- Ethanol: E-diesel R&D
- Biodiesel: 5% biodiesel in diesel engines
- Biomass:
 - Alholmens Kraft power plant, Finland / Timberjack
 - Chariton Valley Biomass Project
- Hydrogen: Fuel cell R&D
- Wind Power



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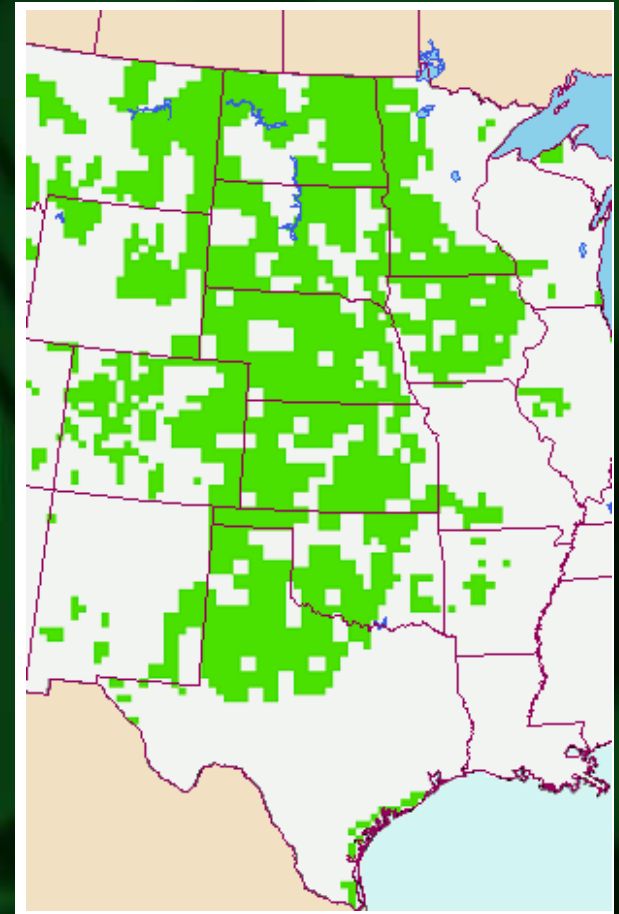


Wind – A Great Midwest Resource

Wind energy is mature and cost effective

- Wind turbines are, and will continue to be, placed on farm land
- Well aligned with John Deere's market presence
- Can increase buying power of farmers

How can farmers get involved ?



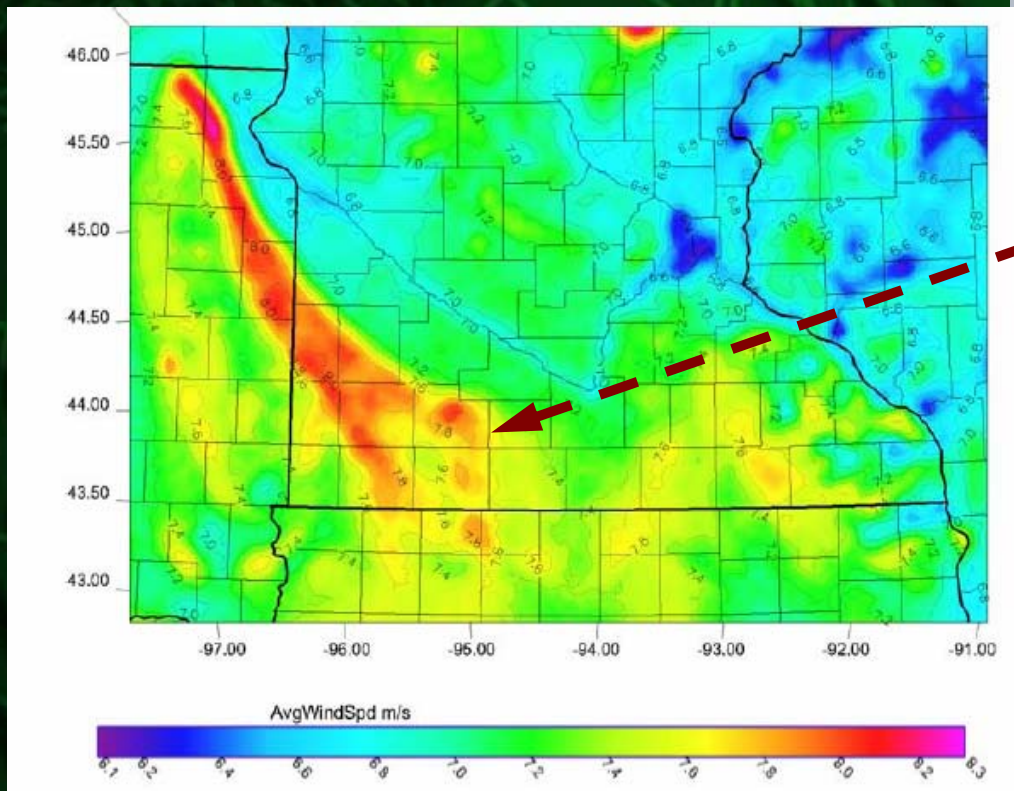
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Pilot Project On Buffalo Ridge

Deere has become equity investor in farmer-owned turbines

- Objective: proof of concept
- Model & learning platform for future activities



**“Learning By
Doing”**

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Lessons Learned For Future Growth

Building partnerships

- Collaborating with local developers
- Working with turbine manufacturers, contractors, off-takers

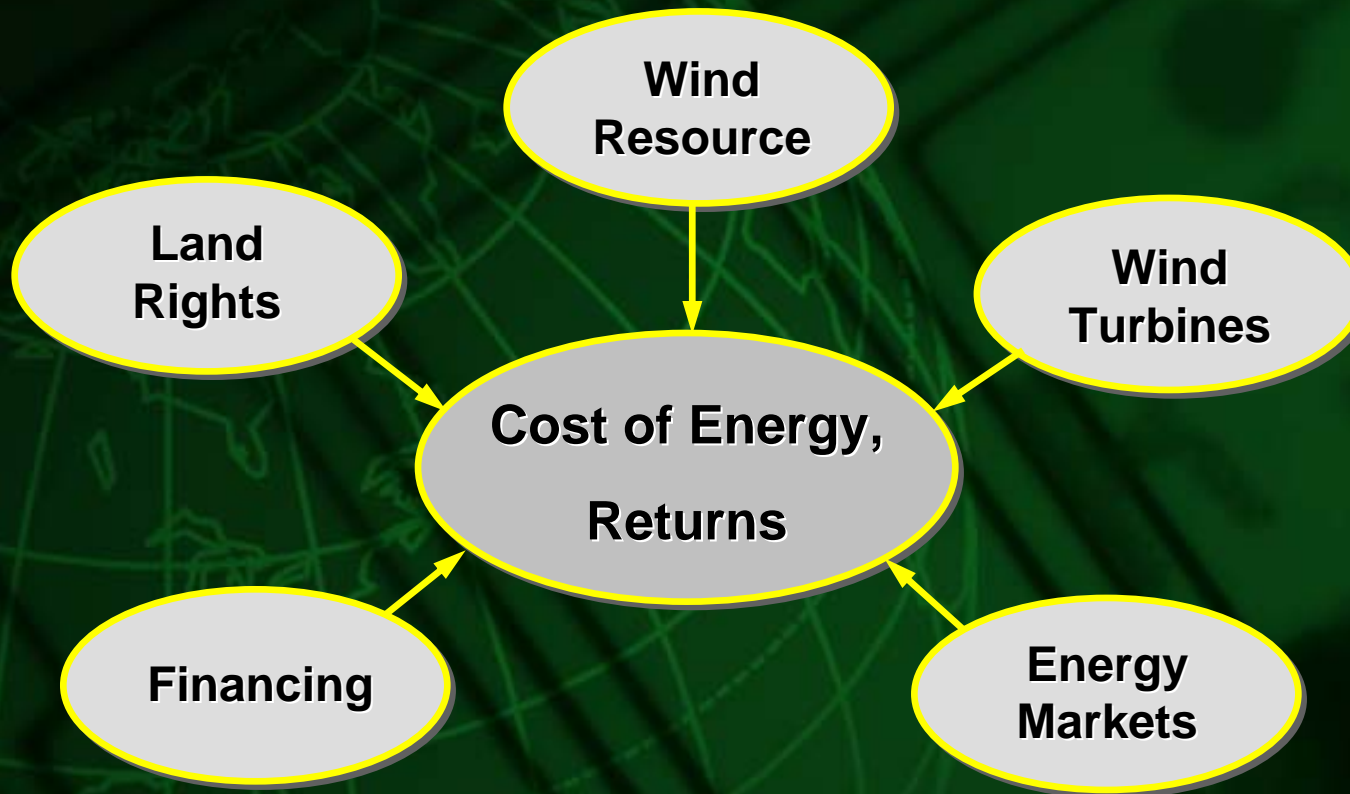


**Becoming active
investors**

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Note - *Five Success Factors*

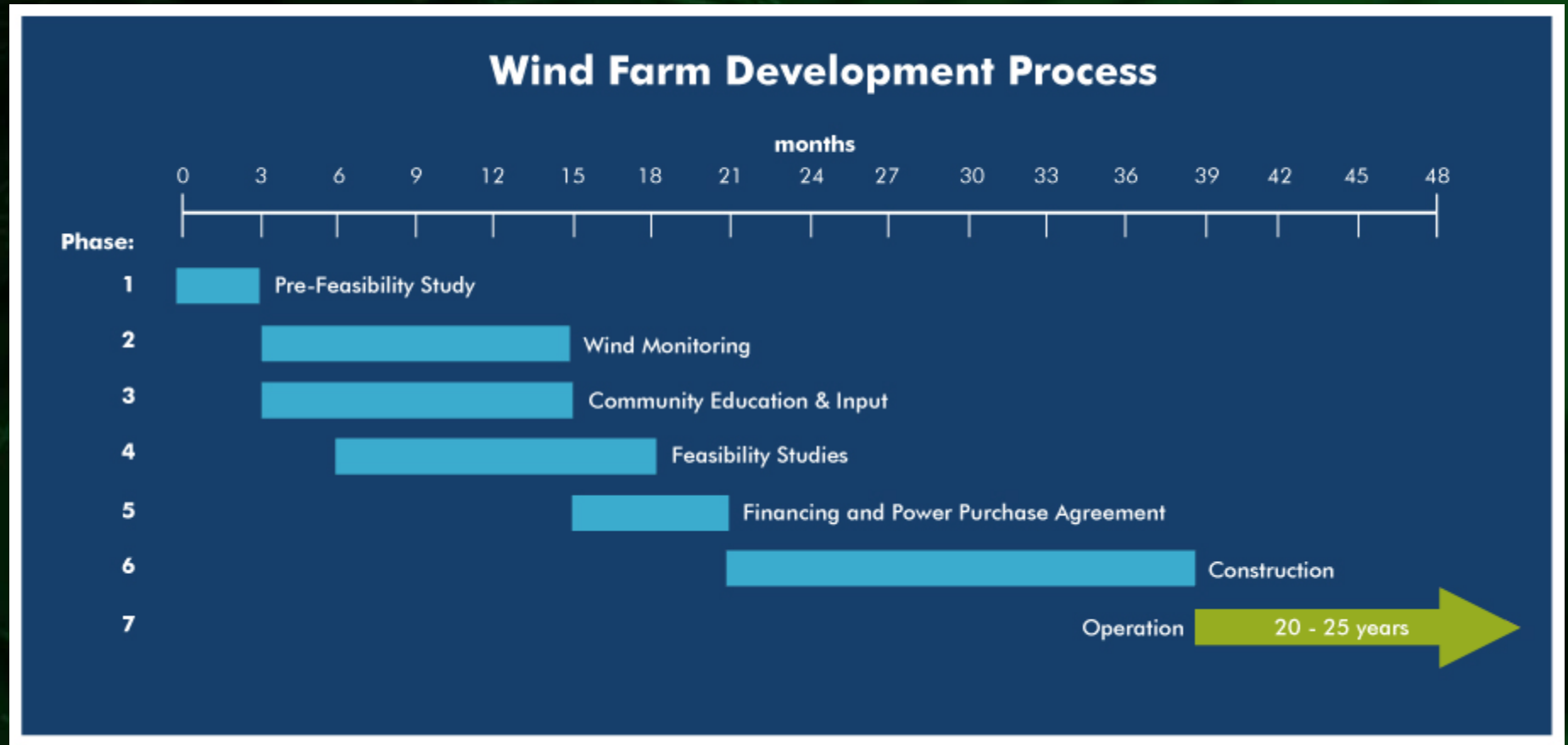


Regional differences must be considered

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Project Development Takes Time And Money



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PTC environment grants us little time

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MISO Transmission Service Request Process

TSR Process Overview

Tariff Specified Times



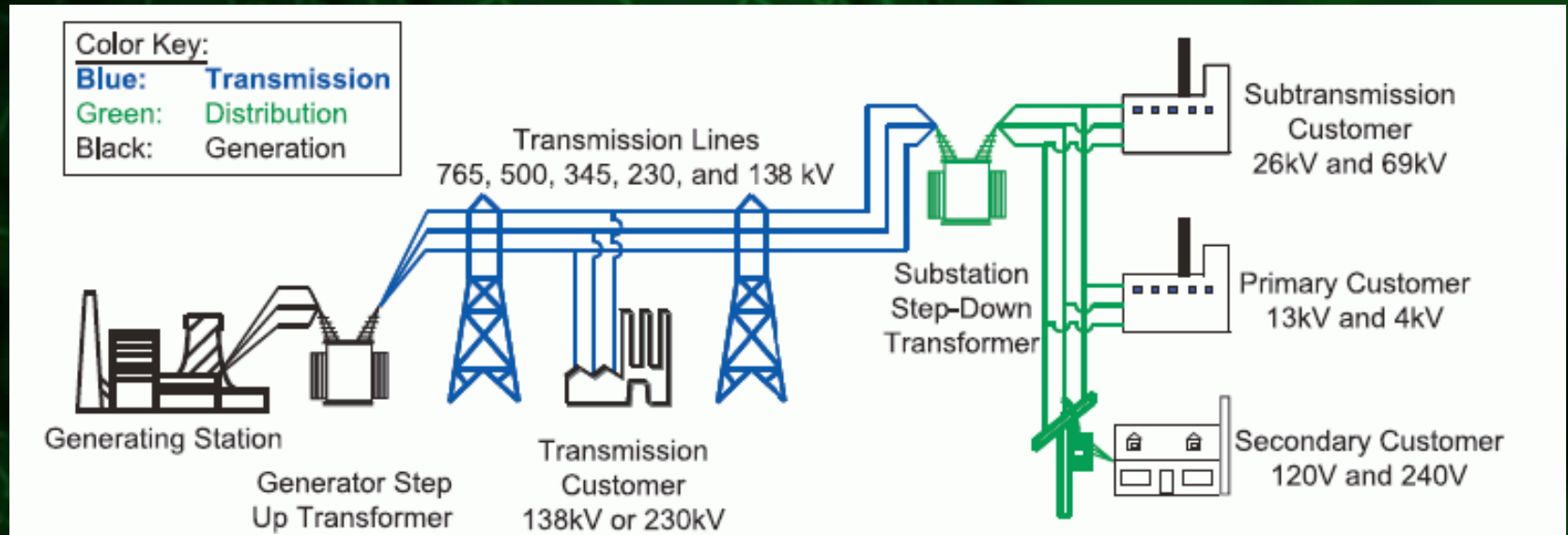
Delivery Service = 195 Days

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Interconnection At Distribution System Level

- Minimizing substation efforts
- Feeding small load centers directly
- Avoiding ISO interconnection studies, fees, and queues



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Grouping Turbines Into Small Wind Farms

Small defined as < 20 MW per site

- **Allows connection to distribution systems at or below 34.5 kV:**
 - Opens up many locations for wind development
- **Regulatory Support:**
 - FERC NOPR for “Small Generators”
- **Other Benefits:**
 - Streamlined permitting
 - Direct engagement of land owners
 - Some economies-of-scale



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Wind Turbines – *A Rare Commodity*

Wind turbine equipment prices are rising due to

- Temporary market demands
- Supply chain limitations
- Increased steel cost
- Increased margin expectations
- Future grid compatibility requirements

Down-payment required

Wind-power farm plans in Colo. canceled

Thursday, September 08, 2005

Cathy Proctor - The Denver
Business Journal

“...Turbines that convert wind into electricity were going for about \$1.4 million last fall. Since then they've jumped to about \$1.65 million, making the project too expensive to continue...”

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JOHN DEERE

Small Wind Farms – *How To Get There*

Projects typically less than 20 MW

- Geographically distributed to accommodate power grid
- Aggregated where it makes sense

Partners involved

- Local owner(s)
- John Deere Credit

Gives local partners a fair share and reduced risk

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Small Wind Farms – *How To Get There*

Local owner(s)

- Have formed LLC or LP and have “skin in the game”
- Receive annual land lease rent for first ten years
- Receive annual management service fee for first ten years
- Purchase the LLC or LP at the end of ten years for Fair Market Value
- Receive 100% of income for remaining life of project (10+ years)

John Deere Credit works closely with qualified partners

- Local wind developers who initiate projects
- Local contractors who participate in BOP work
- Provides turbine equipment from preferred manufacturer(s)
- And provides a comprehensive financial package



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Active Participation Of Farmers Is Core

- Education, with help from IAFB
- Transparent project planning process
- Sincere consideration of environmental impacts
- Fair investment opportunities for local participants
 - “Saving the land for the next generation”
- Direct and indirect benefits for local businesses
 - “Keeping the money in the State/Community”
 - Financial benefits to local tax districts

Community Owned Renewable Energy

“CORE”



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